





# The Islamic State of Iraq and al-Sham and Its Urban Warfare Tactics

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# The Islamic State of Iraq and Al-Sham and Its Urban Warfare Tactics

## By Ihsan Gunduz

### Introduction

The origin of the Islamic State of Iraq and al-Sham (ISIS) can be traced back to the establishment of al-Qaeda in Iraq in 2004 by Abu Musab al-Zarqawi. In 2006 Zarqawi was killed by a United States military air strike, and shortly thereafter the Islamic State of Iraq (ISI) was formed under the leadership of Abu Omar al-Baghdadi. In 2010 al-Baghdadi resumed the leadership of ISI. Three years later ISI stretched into Syria, renaming itself ISIS.

In June 2014 ISIS overran Mosul. Iraq's second largest capturing city, U.S.advanced made military hardware. Since then the group has gained the attention of the entire world. Shortly after it rebranded itself with a new the Islamic name. State (IS),and declared a caliphate.



"An ISIS fighter carrying the militant group's flag on Tall Dabiq which overlooks the town of Dabiq in 2014", VOA,

https://commons.wikimedia.org/wiki/File%3A%C4%B0D bayra%C4%9F%C4%B1 ile bir militan.jp g, Public Domain.

Unlike other violent extremist groups, ISIS has been holding territories in both Syria and Iraq, especially large cities such as Ramadi, Mosul, Fallujah, Deir ez-Zor, and Raqqa, evolving into a hybrid violent organization that utilizes terrorist tactics, urban guerilla warfare, and conventional warfare. It uses internal centralized lines of communication, retains extensive military capabilities, commands infrastructure, funds itself, and engages in sophisticated military tactics. Even though ISIS operates thousands of miles away, it still poses a threat to the United States. If not contained, the group could mobilize individuals sympathetic to its cause to stage attacks on U.S. soil.

As a terrorist organization that holds territories and claims to be a state, ISIS represents a newer form of terrorist group. Therefore, its tactical strategies will define or provide clues about how future wars with such groups may be fought. As such, we may be able to derive lessons on how to prepare for future urban warfare against these types of groups.

### The Four Major Tactics that Contributed to ISIS's Expansion

The main ISIS tactics in urban environments include utilizing different types of explosives, using snipers, fortifying its terrains with hardened defenses, and diverting the attention of counteroffensive attacks against its strongholds by attacking other regions or misleading them. The following is a discussion of these tactics.

### The Use of Explosives (IEDs, VBIEDs, Booby Traps and Landmines)

ISIS has been utilizing explosives, including improvised explosive devices (IED), [suicide] vehicle borne improvised explosive devices (VBIED or SVBIEDs), booby traps, and landmines to stage attacks on cities in Iraq and Syria or to defend the terrain it controls. The use of explosives has been a major offensive and defensive tactic of ISIS to stage attacks on urban centers. The most commonly used explosives have been IEDs, VBIEDs, and booby traps utilizing a variety of explosive materials, and landmines. Compared to previous years, it seems to be evolving towards the use of explosives that are less costly and risky (in human and financial terms) to its militants. The increase in the usage of VBIEDs, IEDs, tunnels, and snipers is an indicator of this trend, which seems to be greater in urban terrain in which ISIS does not have enough support to stage more targeted and localized attacks. When there is a rise in the usage of explosives in an area, it

usually is a prelude to an attempt to take it over. Once it is under the control of ISIS, it seems the area reaches relative stability. Whether or not this tactic has been working for ISIS to gain grassroots support is debatable; however, it has been a pattern of the attacks on urban centers.

As is the case with many of its tactics, ISIS inherited the use of IEDs from al-Qaeda in Iraq as an urban warfare tactic to stage attacks in city centers in Iraq and Syria against civilians, Iraqi armed forces, Shia militias, Syrian armed forces and the other non-state actors. Jonah Leff of Conflict Armament Research stated, "Islamic State forces are producing and deploying IEDs on

an industrial scale that is unprecedented in comparison to other IED-affected conflict arenas." In an interview, Lieutenant General John Johnson, Head of the Pentagon's Joint IED Defeat Organization (JIEDDO), stated that "most of these violent extremist networks [such as ISIS] use IEDs as the principal weapon to try to achieve their goals."



"Ammunition rigged for an IED discovered by Iraqi police in Baghdad in November 2005."

https://en.wikipedia.org/wiki/Improvised\_explosive\_device#/media/File:IED\_Baghdad\_from\_munitions.jpg, Public Domain.

Most recently IEDs have been used for both offensive and defensive purposes.<sup>4</sup> As anti-ISIS forces in Iraq and Syria have been staging attacks against ISIS to clear the militants out of territories and the supply routes they control, ISIS has planted IEDs alongside roads and placed them in the cities or terrain for defense to slow down anti-ISIS forces. For instance, in September 2014, when ISIS was retreating from Erbil, the capital of the Kurdistan Regional Government, it planted several IEDs alongside the highway between Erbil and Mosul, turning the highway into a death trap.<sup>5</sup> Likewise, On 1 April 2015 Iraqi federal police told CNN that they had dismantled hundreds of IEDs after taking over Tikrit. When Iraqi forces and Shia Popular Mobilization Units, with the help of Iranian advisors, staged an offensive against ISIS in Tikrit in March 2015,

they had to dismantle a number of IEDs concealed across the city. Despite the preventive measures taken by Iraqi forces to minimize casualties, a number of IEDs went off, killing several soldiers. Additionally, Arwa Damon of CNN, reporting from Tikrit, said she heard at least 16 explosions. EDs were one of the offensive tactics of ISIS during the battle for the Syrian Kurdish city of Kobanê as well. Planting IEDs has given ISIS militants retreating from urban terrain or villages more time to implement their exit strategy while inflicting casualties on anti-ISIS forces and civilians.

In addition to IEDs, VBIEDs and SVBIEDS have been a signature tactic of staging attacks since 2012 in Iraq and 2013 in Syria. According to a report published by the Institute for the Study of War (ISW) in 2014, even though the number of these types of attacks decreased in some regions in Iraq, they have increased in other areas. <sup>10</sup> Open-source reporting indicates a rising trend in these types of attacks.

The increase in the usage of VBIEDs since the ISIS takeover of major Iraqi and Syrian cities seems to be continuing into the summer of 2015. It seems that the numbers of VBIEDs attacks are higher in urban areas in which ISIS does not have enough local support in the form of sleeper cells that can emerge at critical moments, as it was evident in the attack on Ramadi. While in the first months of 2015 most attacks were directed toward Anbar and Salahaddin Provinces, since April the target of most attacks has been Baghdad and its environs. For instance, on 3 May 2015 a VBIED was detonated in the al-Karrada neighborhood of Baghdad killing 15 and injuring at least 51 people. Since 20 March 2015 ISIS has conducted at least three SVBIED attacks against the Kurdish neighborhoods of Hasaka, in Syria. Similarly, on 8 May VBIEDs detonated in Baquba, the capital of Diyala Province, killing two and damaging the area.

In recent months (from the last week of April and throughout May 2015) the pattern of ISIS attacks on urban centers and checkpoints has been SVBIED explosions followed by the militants entering the area and taking control. For example, ISIS detonated 30 VBIEDs in the center of Ramadi before it seized the city. <sup>14</sup> On condition of anonymity, a senior State Department official told reporters that an armored ISIS bulldozer plowed through barricades lining the city's critical government buildings to open access for VBIEDs to the city center, adding that the same bulldozer was later used as a powerful VBIED as well. <sup>1515</sup> Additionally,

on 26 April ISIS militants took control of several regime positions south of Hasaka Province after launching at least two SVBIEDs. Likewise, from 6-10 May ISIS detonated SVBIEDs in several areas in Syria, including three attempts on the regime-held Kuweiris Military Airbase east of Aleppo and one attempt on a regime checkpoint southeast of Deir ez-Zour. In Homs ISIS claimed responsibility for an SVBIED attack on a lounge frequented by pro-regime fighters. It also had a failed attempt in staging an attack in Hasaka.

ISIS has been booby trapping open terrain and buildings with IEDs (landmines<sup>16</sup> and homemade explosives), posing a grave danger to civilians and security forces in Iraq and Syria. For example, on 3 May 2015 in Kobanê, a landmine planted by ISIS before it retreated from the city exploded, injuring a 15-year old, and killing a five-year old.<sup>17</sup> Their booby traps and landmines have stalled the Iraqi security force offensives against ISIS militants in several areas and have been utilized to hold on to terrain they have gained control of. This was evident in the Tikrit offensive<sup>18</sup> and in the fight in Anbar province.<sup>19</sup> Entering buildings in Tikrit, Iraqi forces were cautious avoid tripping any wired explosives. They found vehicles laden with explosives and buildings that were booby trapped. Likewise, in Kobanê, ISIS militants planted mines and booby trapped the city in the wake of their retreat to slow down the Kurdish People's Protection Units (YPG), Kurdish Women's Protection Units (YPJ), and Peshmerga forces that were in pursuit.<sup>20</sup>

### The Use of Snipers

ISIS has strategically been placing snipers to defend its strongholds and to stage attacks on the new terrain in Iraq and Syria. Several news agencies have reported that ISIS has been increasingly recruiting, training, and using snipers across Iraq and Syria. According to a 2014 ISW report, there was a dramatic increase in the use of snipers in 2013 as compared with the previous year. For example, in the Iraqi province of Diyala snipers were used 4 times in 2012, compared to 29 times in 2013. Observations from Turkish-, Kurdish-, and English-language open sources suggest that the numbers might continue to increase. In September 2014 Turkish authorities captured 42 sniper binoculars in the Turkish- Syrian border town of Hatay. Given the proximity of Hatay to ISIS-held areas in Syria, it is thought that they were en-route to

ISIS territory. In December 2014 an ISIS militant was photographed aiming a 10-foot long sniper rifle in Kobanê;<sup>24</sup> this weapon can fire 23mm caliber bullets and is very effective against lightly armored vehicles.<sup>25</sup> In January 2015 ISIS released some photographs, claiming that it had established a sniper battalion.<sup>26</sup>

### Fortifying Terrain (Trenches, Tunnels and the use of Human Shields)

ISIS has fortified the terrain with hardened defenses to counter anti-ISIS force offensives against the areas it holds and to counter the mobility of civilians in the terrain it controls. This includes trenches, tunnels, and civilian human shields, the latter possibly as its ultimate defensive strategy. Additionally, the tunnels are sometimes used to stage attacks.

Trenches are dug to defend the urban areas against possible attacks from Iraqi security forces and the Kurdish Peshmerga in Iraq, as well as non-state armed actors. In some cases, trenches have been used to defend against air strikes by burning crude oil in them and creating a dark cloud that would provide cover for the ISIS militants. For instance, Turkish-language newspaper *Milliyet*, pro-Kurdish Turkish-language news site *Nerinaazad*, and English-language *al-Monitor* reported that ISIS had excavated approximately 2-meter-wide and 1.5-meter-deep trenches around Mosul in preparation for a possible attack by Kurdish and Iraqi forces to retake the city from ISIS.<sup>27</sup> Additionally, ISIS has been digging trenches in Syria around the cities or around the defense lines. It started this type of reinforcement around Abu Kamal in January 2015 and has expanded this defense fortification to other cities, including Raqqa and al-Mayadin.<sup>28</sup> ISIS militants have dug out a trench in Deir ez-Zour, extending from the Boqrus Desert to the al-Tayyarat area in the al-Mayadin Desert in the eastern countryside. The trench is about 15-km long, and ISIS may try to link this trench with the city of al-Bokamal.<sup>29</sup> ISIS also excavated a network of trenches around Dabiq.<sup>30</sup>

Frontline Peshmerga commanders have reported that ISIS has excavated a 500-km long trench from Shingal to Kirkuk to create a defense line against Peshmerga attacks. International coalition airstrikes and Peshmerga attacks have prevented ISIS attempts to construct the security trenches with bulldozers in the areas close to the Kurdistan region.<sup>31</sup> However, ISIS militants have excavated a number of trenches around Mosul, naming it the "Caliphate Wall."<sup>32</sup>

ISIS has been excavating tunnels to blow up buildings, security checkpoints, and other targets, as well as to move weapons and avoid detection by U.S.-led airstrikes in Iraq and Syria. U.S. officials stated that ISIS has been building a network of bunkers, trenches and tunnels in Iraq. These tunnels are used in attacks on Ramadi. On 11 March 2015 ISIS militants detonated a bomb in an 800-foot-long tunnel under an Iraqi Army headquarters, killing an estimated 22 people. Another tunnel bomb was discharged against Iraqi Security Forces on 15 March. Additionally, in March 2015 *NBC News* and *Nerinaazad* reported that ISIS militants had dug a mile-long tunnel under army headquarters in Iraq's Anbar Province and detonated IEDs under the base, killing at least 40 Iraqi soldiers.

ISIS militants have used tunnels for deployment between the villages of Sere Kaniye in Hasaka to combat Kurdish fighters.<sup>36</sup> ISIS also excavated tunnels in Kobanê after its strategy of using VBIEDs, IEDs, landmines, and booby traps did not work. However, the offensive use of tunnels did not secure a victory in Kobanê.

It seems using civilians as human shields might be ISIS's ultimate defense against airstrikes, having already adapted this tactic against U.S.-led air strikes in northern and eastern Syria.<sup>37</sup> *Al-Monitor* reported that civilians in Mosul have been trying to find ways to escape the city; however, ISIS has placed a ban on leaving the city.<sup>38</sup> For example, Khalid Yunus, a travel agency manager, told *al-Monitor* that ISIS ordered all the travel agencies to close their businesses, and that the only people allowed to leave the city with permission from ISIS were patients unable to find treatment there.<sup>39</sup> The militant group might be planning to use Mosul's 1.5 million residents as human shields against a possible offensive by the Iraqi Security Forces and Peshmerga.

The militants have raised their flags on civilian buildings to create confusion and to blend in among citizens in the cities they control.<sup>40</sup> It is likely that ISIS intends to use civilian casualties to its advantage in case of offensives against the cities it currently controls. Already marginalized by former Iraqi Prime Minister Maliki's policies, those victimized civilians will likely support ISIS if the airstrikes or offensive ground operations cause civilian casualties.

### Diversionary War Tactics

ISIS has been utilizing diversionary war tactics when it comes under attack. By staging new

attacks in a different area, it is able to avoid high causalities in the original location. Thus, it may retreat from one area, but capture another one, which allows it to maintain its offensive momentum, even in the face of retreat.

ISIS has perfected the mixed signals of diversionary tactics to mislead opposing forces about its intentions. Such tactics replicate efforts to distract opponents from a main target. The group has demonstrated that it has the ability to organize complex operations to seize control of urban terrain. Putting pressure on ISIS in one city or area at a time causes the group to direct its attention to other regions, rather than endure significant losses. Its behaviors and attacks leading up to the takeover of Mosul seem to reflect diversionary tactics to distract the Iraqi government from the real target. When ISIS prepared to attack Ramadi, it also staged attacks around Baiji and Baghdad and its vicinity to deter and delay reinforcement of Ramadi by the Iraqi Security Forces. 41

A series of ISIS defeats in Iraq and the Kurdish region of Syria in early 2015 has redirected the group's focus to seek an alternative to its war effort in order to reestablish an image of military strength and rapid territorial gain. Thus, in April 2015 it escalated its attacks into central and western Syria in cities such as Hama, Homs, and Yarmouk.<sup>42</sup>

When ISIS is outnumbered in one region, it appears to counter the offensive by using booby traps, landmines, and IEDs along the possible routes of the offensive to slow down the attack and redeploy its fighters to other regions to gain more territory while diverting all the attention of the anti-ISIS forces to that area. For example, ISIS deployed its militants to Central and Western Syria in March during the Tikrit offensive in Iraq and during the YPG/YPJ offensive against ISIS in the Rojava region of northeastern Syria. Similarly, when Peshmerga and Iraqi Security Forces staged an offensive to clear ISIS out of the Iraqi city of Jalula- Saadiyah<sup>43</sup> in November 2014, ISIS secretly deployed its fighters to occupy towns by the Hamrin Dam.<sup>44</sup>

### A New Age of Warfare: Hybrid Warfare and the Resulting Sophistication of Tactics

ISIS poses a serious threat to the security of the Middle East, and it seems likely that threat will remain so due to the lack of an effective strategy to combat this violent extremist group Military and intelligence officers of the former Baath regime have been employed to provide

tactical strategies for ISIS operations.<sup>45</sup> Additionally, it has been refining its tactics as it gains more combat experience, demonstrating increasing sophistication on the battlefield, as was evident in the fall of Ramadi. Given the above analysis regarding ISIS's tactics, two major factors should be taken into consideration: the hybridization of tactics<sup>46</sup> and the resulting sophistication of ISIS tactics.

Hybrid warfare employs a combination of conventional and irregular tactics to turn the evolving conditions of the battlefield to one's own advantage. ISIS has transformed into an organization that hybridizes three types of tactics: terror,<sup>47</sup> guerilla, and conventional. These tactics and the devices that are employed are not necessarily used separately, but rather, in most cases, they are combined.

### **Terrorist Tactics**

ISIS has been relying on terrorist tactics to attack civilians, intimidate security forces, and instill fear into Iraqis and Syrians. It has increased its IED and VBIED attacks in Baghdad and its vicinity against mostly Shia civilians since 2013 to initiate sectarian violence. Employing this tactic poses a critical challenge to security forces as they attempt to clear ISIS out of the cities it holds. The group uses terrorism to degrade anti-ISIS forces and horrify civilians before it engages in conventional military tactics to take over the urban terrain. ISIS terror tactics, booby trapped buildings, IEDs, and VBIEDs were used in the Tikrit offensive to slow down Iraqi Security Forces and Shia Mobilization Units and to terrorize civilians. Furthermore, beheadings, summary executions, kidnappings, amputations, and crucifixions have predominantly been ISIS terror tactics, making it the most feared terrorist group in the region.

### Guerrilla Warfare Tactics

ISIS has employed guerilla warfare tactics, using explosives, including IEDs and VBIEDs asymmetrically, to disrupt and degrade security forces and to mobilize civilians for support. It has used guerilla tactics where it has weaker fighting capabilities against security forces. Using guerrilla warfare tactics, ISIS militants have turned Iraqi and Syrian cities they hold into a labyrinth of homemade IEDs and booby-trapped buildings. They are also using snipers to counter any offensive against them. For example, in the Kurdistan region of Iraq, ISIS has

employed guerilla tactics to stage attacks with IEDs and VBIEDs against the Peshmerga forces. On 12 April 2015 Peshmerga forces destroyed an ISIS VBIED attempting to target them.<sup>48</sup> In late 2013 ISIS made a tactical shift from terrorism against civilians to guerilla attacks against local security forces for territorial control. The wave of IED attacks on the houses of security personnel in Mosul, southern Ninewa, northern Ninewa, northern Diyala and Jurf al-Sakhar, southwest of Baghdad, were a signature of this tactical shift.

### Conventional Warfare Tactics

Conventional warfare is fought between states with mobilization of their military forces and advanced military hardware. With the claim of statehood and territorial take over, ISIS has employed conventional warfare tactics of fighting ground battles against Iraqi security forces and Kurdish Peshmergas in order to destroy their fighting capabilities and to expand ISIS territories. ISIS has settled in cities such as Mosul, Raqqa, and Fallujah, the control of which helps it to increase its combat capability against any offensive. Over the course of the past four years, as ISIS recruited more officers of the former Baath regime, took control of the cities, and captured more military hardware, it has gained the ability to conduct conventional military operations against security forces, outperforming the Iraqi Army in many battles since January 2014 in Mosul, Fallujah, and, most recently, Ramadi. Throughout 2014 ISIS predominantly tried to implement more conventional warfare tactics than hybrid operations until facing fierce resistance and defeat in Kobanê.

While ISIS has adopted these types of warfare tactics, it has employed the available resources of its military hardware in a complex manner unlike other terrorist groups. The utilization of sophisticated military tactics manifested more prominently in the attack on Ramadi. ISIS battlefield performance there provided the most recent example of the complexity of its tactics, from the deployment of fighters to the utilization of different types of military hardware. It deployed its fighters to Ramadi in smaller groups, numbering two or three. For operational security purposes it silenced its social media and minimized the usage of cell phones. It converted the available military hardware into mega bombs to increase its battlefield effectiveness and used bulldozers to destroy Iraqi Security Forces' defensive lines of concrete walls, turning them

into VBIEDs once the walls had been breached. The tactics and explosives that ISIS used in Ramadi had evolved into more powerful and effective tools. Iraqi Prime Minister al-Abadi stated that the effect of explosives was like a small nuclear bomb.<sup>49</sup> It seems its failure to capture Kobanê has taught ISIS a lesson. While some of these tactics might seem crude, they turn out to be well calculated and sophisticated.

Experts and local Iraqi security soldiers have stated that ISIS has been utilizing its IEDs with increasing sophistication. They can be made with basic material, such as paint, fertilizer,<sup>50</sup> kitchen pots, and cans. It has also designed IEDs to be detonated via cell phones and timers. An Iraqi IED officer has identified 12 main types of IEDs used by ISIS.<sup>51</sup> However, as anti-ISIS forces defeat them, ISIS militants modify weapons and tactics accordingly.

The emerging trend in the sophistication of ISIS attacks appears to be a multiphase planning effort. For example, on 14 May 2015 in Aleppo, ISIS attacked a Free Syrian Army checkpoint with a variety of explosives. In addition to planting landmines, a VBIED was detonated in the attack site.<sup>52</sup>

ISIS seems adapt its destructive tactics when it runs out of all the exit strategies. For example, when Kurdish forces cleared ISIS militants from nearly 200 square miles of territory and seemed to pose a threat to Mosul, ISIS armed SVBIEDs with 14 fuel tanks to stage an attack on Peshmerga forces.<sup>53</sup> Fortunately, those SVBIEDs were destroyed by US-led airstrikes and Kurdish force antitank missiles before causing any harm.<sup>54</sup> These types of attacks indicate that as ISIS gains more battlefield experience, its tactics evolve into more complex attacks or employment of combined counteroffensive tactics using snipers, suicide car bombs, heavy machine guns and mortars. Furthermore, it has utilized booby traps and an elaborate network of tunnels excavated through houses to avoid anti-ISIS airstrikes and snipers.

### **Conclusion**

Unfolding over the course of successive battles, ISIS tactics have become more complex, more sophisticated and more calculated. The ongoing Syrian conflict has created a power vacuum, allowing space there for ISIS to fill, while the weakness of the Iraqi central government in dealing with extremist elements, especially in Sunni majority areas, has given way to ISIS victories.

Combating ISIS will require a clear understanding of its evolving and increasingly sophisticated tactics and a comparable and fully measured response. Despite the complexity of its tactics, unified and well trained armed groups such as the Peshmerga forces of the Kurdistan Regional Government in Iraq and the YPG/YPJ fighters in the Kurdish inhabited region of Syria have been able to defeat ISIS in multiple battles in Iraq and Syria. Therefore, while ISIS currently controls vast swaths of Iraq and Syria, an effective fighting force should be able to clear ISIS militants from the area it controls.

Beyond all of these tactics, it appears that one thing has changed forever: the way wars will be fought. Wars will not be fought between conventional armies using conventional tactics, but rather through an ever-adapting sophisticated hybrid of irregular and conventional warfare fought in city centers involving non-state actors.

### **NOTES**

- <sup>3</sup> McLeary, Paul. "On the Road to Mosul: Iraq Buys IED-Detecting Vehicles." *DefenseNews*. N.p., 24 Feb. 2015. Web. 25 Feb. 2015. <a href="http://www.defensenews.com/story/defense-news/blog/intercepts/2015/02/24/iraq-ied-islamicstate-war/23936071/">http://www.defensenews.com/story/defense-news/blog/intercepts/2015/02/24/iraq-ied-islamicstate-war/23936071/</a>.
- <sup>4</sup> DePetris, Daniel R. "ISIS's 5 Most Lethal Weapons of War." *The National Interest.* N.p., 16 May 2015. Web. 16 May 2015. <a href="http://nationalinterest.org/feature/isiss-5-most-lethal-weapons-war-12900?page=2">http://nationalinterest.org/feature/isiss-5-most-lethal-weapons-war-12900?page=2</a>.
- <sup>5</sup> "IŞİD Kaçarken Yollara ölüm Tuzakları Kurdu." *Yeni Şafak.* N.p., 21 Sept. 2014. Web. 3 Mar. 2015. <a href="http://www.yenisafak.com.tr/dunya/isid-kacarken-yollara-olum-tuzaklari-kurdu-686818">http://www.yenisafak.com.tr/dunya/isid-kacarken-yollara-olum-tuzaklari-kurdu-686818</a>>. See also BOZARSLAN, Felat. "İşte IŞİD'in ölüm Yolu." *Hurriyet.* N.p., 21 Sept. 2014. Web. 5 Mar. 2015. <a href="http://www.hurriyet.com.tr/gundem/27246673.asp">http://www.hurriyet.com.tr/gundem/27246673.asp</a>>.
- <sup>6</sup> Giglio, Mike. "The Hidden Enemy In Iraq." *BuzzFeed News*. N.p., 19 Mar. 2015. Web. 20 Mar. 2015. <a href="http://www.buzzfeed.com/mikegiglio/the-hidden-enemy-in-iraq#.bfmyqZGOD">http://www.buzzfeed.com/mikegiglio/the-hidden-enemy-in-iraq#.bfmyqZGOD</a>>.
- <sup>7</sup> "Tikrit'te Bubi Tuzakları Irak Ordusunu Yavaşlatıyor." *Milliyet*. N.p., 03 Mar. 2015. Web. 03 Mar. 2015. <a href="http://www.milliyet.com.tr/tikrit-te-bubi-tuzaklari-irak/dunya/detay/2023218/default.htm">http://www.milliyet.com.tr/tikrit-te-bubi-tuzaklari-irak/dunya/detay/2023218/default.htm</a>.
- <sup>8</sup> Alkhshali, Hamdi, Jomana Karadsheh, and Don Melvin. "ISIS Flees Tikrit, Leaving Bombs and Fear." *CNN*. Cable News Network, 2 Apr. 2015. Web. 3 Apr. 2015. <a href="http://www.cnn.com/2015/04/01/middleeast/iraq-isis-tikrit/">http://www.cnn.com/2015/04/01/middleeast/iraq-isis-tikrit/</a>.

- <sup>10</sup> Bilger, Alex. ISIS Annual Reports Reveal a Metrics-Driven Military Command. Institute for the Study of War, May 22, 2014. Web. 15 May 2015. http://www.understandingwar.org/sites/default/files/ISWBackgrounder\_ISIS\_Annual\_Reports\_0.pdf
- <sup>11</sup> Moore, Jack. "Isis Sleeper Cells and Double Agents Helped Capture of Ramadi." *Newsweek*. N.p., 19 May 2015. Web. 15 June 2015. <a href="http://europe.newsweek.com/isis-sleeper-cells-double-agents-helped-capture-ramadi-327493">http://europe.newsweek.com/isis-sleeper-cells-double-agents-helped-capture-ramadi-327493</a>.
- <sup>12</sup> "IŞİD'den Bağdat'ta Saldırı." *Milliyet*. N.p., 4 May 2015. Web. 4 May 2015. <a href="http://www.milliyet.com.tr/isid-denbagdat-ta-saldiri/dunya/detay/2053569/default.htm">http://www.milliyet.com.tr/isid-denbagdat-ta-saldiri/dunya/detay/2053569/default.htm</a>.
- <sup>13</sup> "Suriye'de Nevruz Kutlayan Kürtler'e Bombalı Saldırı." *VOA*. N.p., 21 Mar. 2015. Web. 22 Mar. 2015. <a href="http://www.amerikaninsesi.com/content/suriye-de-nevruz-kutlayan-kurtler-e-bombali-saldiri/2689785.html">http://www.amerikaninsesi.com/content/suriye-de-nevruz-kutlayan-kurtler-e-bombali-saldiri/2689785.html</a>.
- <sup>14</sup> Fishel, Justin. "Fall of Ramadi: 30 Car Bombs, 10 as Big as Oklahoma City Blast, US Official Says." *ABC News*. N.p., 20 May 2015. Web. 22 May 2015. <a href="http://abcnews.go.com/ABCNews/fall-ramadi-30-car-bombs-10-bigoklahoma/story?id=31188102">http://abcnews.go.com/ABCNews/fall-ramadi-30-car-bombs-10-bigoklahoma/story?id=31188102</a>>. See also The Wall Street Journal reported 27 VBIEDs. COKER, MARGARET. "How Islamic State's Win in Ramadi Reveals New Weapons, Tactical Sophistication and Prowess." *The Wall Street Journal*. N.p., 25 May 2015. Web. 25 May 2015. <a href="http://www.wsj.com/articles/islamic-states-gains-reveal-newprowess-on-battlefield-1432592298">http://www.wsj.com/articles/islamic-states-gains-reveal-newprowess-on-battlefield-1432592298</a>>.

<sup>&</sup>lt;sup>1</sup> Lewis, Jessica D. *The Islamic State: A Counter-Strategy for A Counter-State*. Rep. no. 21. Institute for the Study of War, July 2014. Web. 1 Mar. 2015. <a href="http://www.understandingwar.org/sites/default/files/Lewis-Center%20of%20gravity.pdf">http://www.understandingwar.org/sites/default/files/Lewis-Center%20of%20gravity.pdf</a>.

<sup>&</sup>lt;sup>2</sup> Tracking Arms in Conflict - Lessons from Syria and Iraq | Events | The Stimson Center | Pragmatic Steps for Global Security. Perf. Jonah Leff, Shawn Harris, Tim Michetti. The Stimson Center, 7 Apr. 2007. Web. 2 May 2015. <a href="http://www.stimson.org/events/tracking-arms-in-conflict-lessons-from-syria-and-iraq/">http://www.stimson.org/events/tracking-arms-in-conflict-lessons-from-syria-and-iraq/</a>.

<sup>&</sup>lt;sup>9</sup> https://www.youtube.com/watch?v=\_2nFnHWBNmA

<sup>15</sup> Ibid.

- <sup>16</sup> Iraq is one of the most heavily mined countries in the world. "Iraq." *Landmine and Cluster Munition Monitor*. N.p., n.d. Web. 26 April 2015. <a href="http://www.the-monitor.org/index.php/cp/display/region\_profiles/theme/3539">http://www.the-monitor.org/index.php/cp/display/region\_profiles/theme/3539</a>>.
- <sup>17</sup> "Li Kobanê Zarokê Pê Li Mayina DAIŞ'ê Kir Jiyana Xwe Ji Dest Da." *ANF*. N.p., 3 May 2015. Web. 4 May 2015. <a href="http://anfkurdi.com/kurdistan/li-kobane-zaroke-pe-li-mayina-dais-e-kir-jiyana-xwe-ji-dest-da">http://anfkurdi.com/kurdistan/li-kobane-zaroke-pe-li-mayina-dais-e-kir-jiyana-xwe-ji-dest-da</a>.
- <sup>18</sup> "Enemy Fire, Booby-traps Delay Iraqi Forces' Advance in Tikrit." *Reuters.* Thomson Reuters, 29 Mar. 2015. Web. 30 Mar. 2015. http://www.reuters.com/article/2015/03/29/us-mideast-crisis-iraq-idUSKBN0MP0RI20150329; and Sim, David. "Iraq: Isis Snipers, Bombs and Booby Traps Slow Progress in the Battle for Tikrit [Photo Report]." *International Business Times RSS.* N.p., 13 Mar. 2015. Web. 14 Mar. 2015. <a href="http://www.ibtimes.co.uk/iraq-isissnipers-bombs-booby-traps-slow-progress-battle-tikrit-photo-report-1491823">http://www.ibtimes.co.uk/iraq-isissnipers-bombs-booby-traps-slow-progress-battle-tikrit-photo-report-1491823>.
- <sup>19</sup> "ISIS Mines and Snipers Slow Iraqi Assault on Ramadi." *Rudaw*. N.p., 23 Apr. 2015. Web. 12 May 2015. <a href="http://rudaw.net/english/middleeast/iraq/230420152">http://rudaw.net/english/middleeast/iraq/230420152</a>.
- <sup>20</sup> "IŞİD'e Darbe üstüne Darbe." *Haberingundemi.com.* N.p., 08 Oct. 2014. Web. 02 Mar. 2015. <a href="http://haberingundemi.com/haber/ISID-e-darbe-ustune-darbe/128075">http://haberingundemi.com/haber/ISID-e-darbe-ustune-darbe/128075</a>.
- <sup>21</sup> Bilger, Alex. ISIS Annual Reports. May 22, 2014.
- <sup>22</sup> Berwani, Hawar. "Sniper Kills, Injures 2 IPs in Diyala Iraqi News." *Iraq News, the Latest Iraq News*. N.p., 09 July 2014. Web. 4 Apr. 2015. <a href="http://www.iraqinews.com/iraq-war/sniper-kills-injures-ips-in-diyala/">http://www.iraqinews.com/iraq-war/sniper-kills-injures-ips-in-diyala/</a>. "Diyala'da çatışmalar Sürüyor." *Yenisafak*. N.p., 23 Aug. 2014. Web. 23 Apr. 2015. <a href="http://www.yenisafak.com.tr/dunya/diyalada-catismalar-suruyor-679256">http://www.yenisafak.com.tr/dunya/diyalada-catismalar-suruyor-679256</a>.
- <sup>23</sup> "Sınırda 42 Keskin Nişancı Dürbünü Ele Geçirildi." *Haberler.com.* N.p., 27 Sept. 2014. Web. 16 Mar. 2015. <a href="http://www.haberler.com/sinirda-gizemli-olay-cok-sayida-keskin-nisanci-6531374-haberi/">http://www.haberler.com/sinirda-gizemli-olay-cok-sayida-keskin-nisanci-6531374-haberi/</a>.
- <sup>24</sup> "İşte IŞİD'in Yeni ölüm Makinesi: 3 Metrelik Sniper." *Milliyet*. N.p., 12 Apr. 2014. Web. 17 Mar. 2015. <a href="http://www.milliyet.com.tr/iste-isid-in-yeni-olum-makinesi-3-gundem-1979307/">http://www.milliyet.com.tr/iste-isid-in-yeni-olum-makinesi-3-gundem-1979307/</a>.
- <sup>25</sup> "IŞİD'in Yeni Ölüm Makinesi: 3 Metrelik Sniper." *Haberler.com.* N.p., 4 Dec. 2014. Web. 13 Apr. 2015. <a href="http://www.haberler.com/isid-libya-nin-dogusunda-egitim-kampi-kurdu-6745666-haberi/">http://www.haberler.com/isid-libya-nin-dogusunda-egitim-kampi-kurdu-6745666-haberi/</a>.
- <sup>26</sup> Verkaik, Robert. "Islamic State Sniper: ISIS Sets up Sharp-shooter Battalion Inspired by Infamous Iraqi Killer Who Took out 40 Americans in Baghdad." *Mail Online*. Associated Newspapers, 28 Jan. 2015. Web. 20 Mar. 2015. <a href="http://www.dailymail.co.uk/news/article-2928652/Iraqi-Sniper-ISIS-posts-pictures-sniper-battalion-inspired-Chris-Kyle-s-notorious-insurgent-rival-Juba-killed-40-Americans-Baghdad.html">http://www.dailymail.co.uk/news/article-2928652/Iraqi-Sniper-ISIS-posts-pictures-sniper-battalion-inspired-Chris-Kyle-s-notorious-insurgent-rival-Juba-killed-40-Americans-Baghdad.html</a>.
- <sup>27</sup> "IŞİD, Musul Için Savaş Hazırlıkları Yapıyor." *Milliyet*. N.p., 20 Mar. 2015. Web. 22 Mar. 2015. <a href="http://www.milliyet.com.tr/isid-musul-icin-savas/dunya/detay/2031297/default.htm">http://www.milliyet.com.tr/isid-musul-icin-savas/dunya/detay/2031297/default.htm</a>; "IŞİD Saldırmak Için 1,6 Km'lik Tünel Kazdı Nerina Azad." *NerinaAzad*. N.p., 13 Mar. 2015. Web. 13 Mar. 2015. <a href="http://www.nerinaazad.com/news/actual/isis/isid-saldirmak-icin-16-kmlik-tunel-kazdi">http://www.nerinaazad.com/news/actual/isis/isid-saldirmak-icin-16-kmlik-tunel-kazdi</a>; Elias, Saleh. "Musul Halkı Savaşa Hazırlanıyor." *Almonitor*. N.p., 13 Mar. 2015. Web. 13 Mar. 2015. <a href="http://www.almonitor.com/pulse/tr/contents/articles/originals/2015/03/iraq-mosul-battle-residents-trapped-islamic-state.html#>.</a>.
- <sup>28</sup> "After Repeated Attacks Launched by Unknown Gunmen, IS Digs a Trench around the City of Al- Mayadin." Syrian Observatory For Human Rights. N.p., 28 Mar. 2015. Web. 29 Mar. 2015. <a href="http://www.syriahr.com/en/2015/03/after-repeated-attacks-launched-by-unknown-gunmen-is-digs-a-trench-aroundthe-city-of-al-mayadin/">http://www.syriahr.com/en/2015/03/after-repeated-attacks-launched-by-unknown-gunmen-is-digs-a-trench-aroundthe-city-of-al-mayadin/</a>>.
- <sup>29</sup> Ibid.
- <sup>30</sup> Cafarella, Jennifer. "ISIS in Syria Campaign Update: March 31, 2015." *Institute for the Study of War.* N.p., 31 Mar. 2015. Web. 1 Apr. 2015. <a href="http://www.understandingwar.org/backgrounder/isis-syria-campaign-update-march-31-2015">http://www.understandingwar.org/backgrounder/isis-syria-campaign-update-march-31-2015</a>.
- <sup>31</sup> "ISIS Digging Massive Border Trench." *Rudaw.* N.p., 13 Feb. 2015. Web. 13 Feb. 2015. <a href="http://rudaw.net/english/kurdistan/130220154">http://rudaw.net/english/kurdistan/130220154</a>>. 14

- <sup>32</sup> Mamoun, Abdelhak. "URGENT: ISIS Builds "Caliphate Wall" around Mosul Iraqi News." *Iraq News, the Latest Iraq News*. N.p., 18 Mar. 2015. Web. 18 Mar. 2015. <a href="http://www.iraqinews.com/sports/urgent-isis-builds-caliphatewall-around-mosul/">http://www.iraqinews.com/sports/urgent-isis-builds-caliphatewall-around-mosul/</a>.
- <sup>33</sup> Weisgerber, Marcus. "ISIS Is Using Tunnel Bombs in Iraq." *Defense One.* N.p., 8 June 2015. Web. 9 June 2015. <a href="http://www.defenseone.com/threats/2015/06/isis-using-tunnel-bombs-iraq/114730/">http://www.defenseone.com/threats/2015/06/isis-using-tunnel-bombs-iraq/114730/</a>.
- <sup>34</sup> Ibid.
- <sup>35</sup> "40 Dead as ISIS Plants 300 IEDs Under Army HQ: Official." *NBC News.* N.p., 13 Mar. 2015. Web. 14 Mar. 2015. <a href="http://www.nbcnews.com/storyline/isis-terror/40-iraqi-soldiers-die-after-isis-plants-300-ieds-undern322796">http://www.nbcnews.com/storyline/isis-terror/40-iraqi-soldiers-die-after-isis-plants-300-ieds-undern322796</a>; "IŞİD Saldırmak Için 1,6 Km'lik Tünel Kazdı Nerina Azad." *NerinaAzad*; and "40 Dead as ISIS Plants 300 IEDs Under Army HQ: Official." *NBC News.* N.p., 13 Mar. 2015.
- <sup>36</sup> "Jihadists Use Tunnels to Avoid Kurdish and American Fire North Syria ARA News." *ARA News.* N.p., 1 June 2015. Web. 1 June 2015. <a href="http://aranews.net/2015/06/jihadists-use-tunnels-to-avoid-kurdish-and-american-firenorth-syria/">http://aranews.net/2015/06/jihadists-use-tunnels-to-avoid-kurdish-and-american-firenorth-syria/</a>.
- <sup>37</sup> Mezzofiore, Gianluca. "Pentagon: ISIS Using Local Population in Syria as Human Shields." *International Business Times*. N.p., 23 Sept. 2014. Web. 22 Mar. 2015. <a href="http://www.ibtimes.co.uk/pentagon-isis-using-localpopulation-syria-human-shields-1466869">http://www.ibtimes.co.uk/pentagon-isis-using-localpopulation-syria-human-shields-1466869</a>>.
- <sup>38</sup> Elias, Saleh. "Musul Halkı Savaşa Hazırlanıyor." *Almonitor*.
- <sup>39</sup> Ibid.
- <sup>40</sup> Salman, Raheem, and Yara Bayoumy. "Wary of Air Strikes, ISIS Militants Change Tactics." *Alarabiya*. N.p., 27 Sept. 2014. Web. 13 June 2015. <a href="http://english.alarabiya.net/en/perspective/analysis/2014/09/27/Wary-of-airstrikes-ISIS-militants-change-tactics.html">http://english.alarabiya.net/en/perspective/analysis/2014/09/27/Wary-of-airstrikes-ISIS-militants-change-tactics.html</a>.
- <sup>41</sup> Lister, Tim. "Why ISIS Is Winning, and How Its Foes Can Reverse It CNN.com." *CNN*. Cable News Network, 9 June 2015. Web. 9 June 2015. <a href="http://edition.cnn.com/2015/05/28/middleeast/isis-how-to-stop-it/index.html">http://edition.cnn.com/2015/05/28/middleeast/isis-how-to-stop-it/index.html</a>>.
- <sup>42</sup> Cafarella, Jennifer. "ISIS in Syria Campaign Update: March 31, 2015.

saddamhusseins/2015/04/04/aa97676c-cc32-11e4-8730-4f473416e759\_story.html>.

- <sup>43</sup> "Jalawla Heavily Mined, Most Homes Booby Trapped." *Rudaw.* N.p., 25 Nov. 2014. Web. 24 Apr. 2015. <a href="http://rudaw.net/english/kurdistan/251120141">http://rudaw.net/english/kurdistan/251120141</a>; Adnan, Sinan, and Ahmed Ali. "Iraq Situation Report: November 24, 2014." (n.d.): n. pag. *Institute for the Study of War.* 24 Nov. 2014. Web. 7 May 2015. <a href="http://www.understandingwar.org/sites/default/files/2014-11-24%20Situation%20Report.pdf">http://www.understandingwar.org/sites/default/files/2014-11-24%20Situation%20Report.pdf</a>.
- <sup>44</sup> Knights, Michael, and Alexandre Mello. "The Cult of the Offensive: The Islamic State on Defense | Combating Terrorism Center at West Point." *CTC Sentinel* 8.4 (2015): 1-7. *Combating Terrorism Center at West Point*. Apr. 2015. Web. 20 May 2015. <a href="https://www.ctc.usma.edu/posts/the-cult-of-the-offensive-the-islamic-state-on-defense">https://www.ctc.usma.edu/posts/the-cult-of-the-offensive-the-islamic-state-on-defense>.
- <sup>45</sup> Reuter, Christoph. "The Terror Strategist: Secret Files Reveal the Structure of Islamic State." *Der Spiegel*. N.p., 18 Apr. 2015. Web. 18 Apr. 2015. <a href="http://www.spiegel.de/international/world/islamic-state-files-show-structure-ofislamist-terror-group-a-1029274.html">http://www.spiegel.de/international/world/islamic-state-files-show-structure-ofislamist-terror-group-a-1029274.html</a>,; Sly, Liz. "The Hidden Hand Behind the Islamic State Militants? Saddam Hussein's." *The Washington Post*. N.p., 5 Apr. 2015. Web. 6 Apr. 2015.
  <a href="http://www.washingtonpost.com/world/middle\_east/the-hidden-hand-behind-the-islamic-state-militants-">http://www.washingtonpost.com/world/middle\_east/the-hidden-hand-behind-the-islamic-state-militants-</a>
- <sup>46</sup> Knights, Michael. "ISIL's Political–Military Power in Iraq," Combating Terrorism Center at West Point." CTC Sentinel 7.8 (2014): 1-7. Combating Terrorism Center at West Point. August. 2014. Web. 28 May 2015.
  <a href="https://www.ctc.usma.edu/v2/wp-content/uploads/2014/09/CTCSentinel-Vol7Iss81.pdf">https://www.ctc.usma.edu/v2/wp-content/uploads/2014/09/CTCSentinel-Vol7Iss81.pdf</a>.;
  Lewis Mcfate, Jessica. The ISIS Defense in Iraq and Syria: Countering an Adaptive Enemy. Rep. no. 27. Institute for the Study of War, May 2015. Web. 28 May. 2015. <a href="https://understandingwar.org/report/isis-defense-iraq-and-syriacountering-adaptive-enemy">https://understandingwar.org/report/isis-defense-iraq-and-syriacountering-adaptive-enemy</a>.

- <sup>50</sup> Hubbard, Ben, and Karam Shoumali. "Fertilizer, Also Suited for Bombs, Flows to ISIS Territory From Turkey." *The New York Times.* N.p., 4 May 2015. Web. 4 May 2015. <a href="http://www.nytimes.com/2015/05/05/world/europe/fertilizer-also-suited-for-bombs-flows-to-isis-territory-fromturkey.html?emc=edit\_ntn\_20150504&nlid=63779067&tntemail0=y&\_r=0>.; Dettmer, Jamie. "Where ISIS Gets Its Bombs." *The Daily Beast.* The Daily Beast, 22 May 2015. Web. 23 May 2015. <a href="http://www.thedailybeast.com/articles/2015/05/22/where-isis-gets-its-bombs.html">http://www.thedailybeast.com/articles/2015/05/22/where-isis-gets-its-bombs.html</a>.
- <sup>51</sup> Giglio, Mike. "The Hidden Enemy In Iraq." BuzzFeed News.
- <sup>52</sup> "IŞİD, Kilis'in Karşısında Bombalı Araç Patlattı." *Vatan Gazetesi*. N.p., 14 May 2015. Web. 15 May 2015. <a href="http://www.gazetevatan.com/isid-kilis-in-karsisinda-bombali-arac-patlatti-790640-gundem/">http://www.gazetevatan.com/isid-kilis-in-karsisinda-bombali-arac-patlatti-790640-gundem/</a>.
- <sup>53</sup> Coles, Isabel. "Kurdish Forces Squeeze Islamic State Supply Line in Northern Iraq." *Reuters UK.* N.p., 21 Jan. 2015. Web. 2 June 2015. <a href="http://uk.reuters.com/article/2015/01/21/uk-mideast-crisis-iraq-mosulidUKKBN0KU2EG20150121">http://uk.reuters.com/article/2015/01/21/uk-mideast-crisis-iraq-mosulidUKKBN0KU2EG20150121</a>.
- <sup>54</sup> Ibid; and Abdulrazak, Hawar. "Peshmerga Kills Over 200 IS Militants in East Mosul Operation." *Basnews*. N.p., 22 Jan. 2015. Web. 6 Apr. 2015. <a href="http://www.basnews.com/en/news/2015/01/22/peshmerga-kills-over-200-ismilitants-in-east-mosul-operation/">http://www.basnews.com/en/news/2015/01/22/peshmerga-kills-over-200-ismilitants-in-east-mosul-operation/</a>>.

<sup>&</sup>lt;sup>47</sup> Ibid.

<sup>&</sup>lt;sup>48</sup> Piggott, Mark. "Isis: Incredible Video Shows Moment a Suicide Bomber's Car Explodes in Midair." *International Business Times*. N.p., 13 Apr. 2015. Web. 13 Apr. 2015. <a href="http://www.ibtimes.co.uk/isis-incredible-video-showsmoment-suicide-bombers-car-explodes-midair-1496207">http://www.ibtimes.co.uk/isis-incredible-video-showsmoment-suicide-bombers-car-explodes-midair-1496207</a>.

<sup>&</sup>lt;sup>49</sup> Coker, Margaret. "How Islamic State's Win in Ramadi Reveals New Weapons, Tactical Sophistication and Prowess." *The Wall Street Journal*. N.p., 25 May 2015. Web. 25 May 2015. <a href="http://www.wsj.com/articles/islamicstates-gains-reveal-new-prowess-on-battlefield-1432592298">http://www.wsj.com/articles/islamicstates-gains-reveal-new-prowess-on-battlefield-1432592298</a>.